REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the remarks which follow.

I. Claim Amendments

By the foregoing amendments to the claims, claims 1-101 have been canceled, and new claims 102-116 have been added. The new claims are supported throughout the application as filed.

The amendments to the claims, including cancellation of claims, have been made without prejudice or disclaimer to any subject matter recited or canceled herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added, and entry of the foregoing amendments to the above-identified application are respectfully requested.

II. Response to Objections to the Specification

At page 5 of the Office Action, the specification has been objected to for the following reasons:

A. The abstract of the disclosure has been objected to for allegedly containing improper language/format.

In the preliminary amendment filed on June 17, 2008 in the present application, the abstract was replaced with one that conforms to the guidelines of 37 C.F.R. § 1.72(b) and MPEP § 608.01(b).

B. The title has been objected to because it is allegedly not descriptive.

The title has been amended herein to read "NOVEL NITRILE HYDRATASE VARIANT."

Applicants respectfully request reconsideration and withdrawal of the objections to the specification.

III. Response to Objections to the Claims

At page 6 of the Office Action, the claims have been objected to for a number of reasons.

To expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, the claims have been amended as set forth above. Applicants submit that the amendments to the claims address the Examiner's concerns. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to the claims.

IV. Response to Claim Rejections Under 35 U.S.C. § 101

At page 7 of the Office Action, claims 1-9 and 82-84 have been rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

In particular, the Examiner has indicated that because the claims do not recite that the proteins are "isolated" or "purified", the claims are directed to a product of nature.

The claims have been amended to recite "isolated" proteins. Thus, Applicants respectfully request reconsideration and withdrawal of this rejection.

V. Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

At pages 7-10 of the Office Action, claims 1-9, 55, 72, and 77-84 have been rejected under 35 U.S.C. § 112, second paragraph, as purportedly indefinite for a number of reasons.

To expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, the claims have been amended as set forth above. Applicants submit that the claims as amended particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

VI. Response to Claim Rejections Under 35 U.S.C. § 112, First Paragraph

- A. At pages 10-12 of the Office Action, claims 1-9, 55, 72, and 77-84 have been rejected under 35 U.S.C. § 112, first paragraph, as purportedly failing to comply with the written description requirement.
- **B.** At pages 12-15 of the Office Action, claims 1-9, 55, 72, and 77-84 have been rejected under 35 U.S.C. § 112, first paragraph, as purportedly lacking enablement.

To expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, the claims have been amended as described above. Applicants submit that the claims as amended are fully supported by the Examples set forth in the present

application. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, first paragraph.

VII. Claim Rejections Under 35 U.S.C. § 102(b)

At pages 16-18 of the Office Action, claims 1-2, 4-8, 55, 72, 77, and 82-84 have been rejected under 35 U.S.C. § 102(b) as purportedly being anticipated by Kobayashi et al. (Biochimica et Biophysics Acta, 1991). This rejection is respectfully traversed.

It is well established that for prior art to be anticipatory, every element of the claimed invention must be disclosed in a single item of prior art in the form literally defined in the claim. *See, e.g., Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 213 U.S.P.Q. 81, 90 (Fed. Cir. 1986). Applicants submit that Kobayashi et al. fails to satisfy this requirement, for at least the following reasons.

To expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, the claims have been amended as described above. Kobayashi et al. does not teach or even suggest the subject matter of the present claims.

Concerning Kobayashi et al., the Examiner stated that the reference variants are encompassed by the present claims. Applicants respectfully submit that the Examiner's position is not correct. Using either uniform number matching (203 amino acids of SEQ ID NO: 1 and 229 amino acids of SEQ ID NO: 2) or conserved motif matching, the same amino acid change at the same position will occur accidentally when we focus on a particular position. However, the entire amino acid sequence is clearly not the same, because the Nitrile Hydratase enzymes of the present application and of Kobayashi at al. are derived from different species. Thus, the total homology should not be so high that the sequences become totally the same sequence. That is, Kobayashi et al. does not teach or suggest the subject matter of the present application. Therefore, the amended claims are novel.

In view of the above, Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this Amendment and Reply or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney so that prosecution of this application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 9, 2008

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